

ABSTRACT

An actuator assembly for moving an air valve between a position in which air is admitted to an air bag mounted in a vehicle and another position in which air is released from the air bag. The actuator assembly has a U-shaped rail that is attached to a cross member of the vehicle. The rail has a channel. A linear actuator is attached to the rail. The actuator has a moveable shaft. An actuator arm is attached to the rail and has a first end attached to the actuator. The actuator operates to linearly move the arm. A ball bearing is movably retained within the channel. The ball bearing has a stud extending from the ball bearing through the actuator arm and is attached to the actuator shaft. A mounting plate has an end attached to the air valve and another end attached to a second end of the actuator arm. The actuator operates to move the air valve so as to adjust the ride firmness of the vehicle.